

(FILE 'HOME' ENTERED AT 11:12:42 ON 20 AUG 2000)

FILE 'MEDLINE, EMBASE, SCISEARCH, CAPLUS, USPATFULL' ENTERED AT 11:13:46
ON 20 AUG 2000

L1 30095 S ((HALOGEN? OR IODIN? OR BROMIN?) (3A) (XANTHENE?)) OR
((ROSE
L2 1183703 S ((RADIOSENSITI?) OR ((RADIAT? OR ION?) (2A) SENSITI?)) OR
(X
L3 371709 S (TREAT? OR THERAP?) (5A) (CANCER? OR TUMOR? OR TUMOUR? OR
NEO
L4 1239 S L1 AND L2
L5 213 S L4 AND L3
L6 88 S L5 AND (IMAGE OR IMAGING)
L7 87 DUP REM L6 (1 DUPLICATE REMOVED)
L8 408 S L3 (3P) L1
L9 53 S L8 AND L2
L10 315 S L3 (P) L1
L11 0 S L10 AND L2
L12 42 S L10 AND L2
L13 35 DUP REM L12 (7 DUPLICATES REMOVED)
L14 9982 S ((HALOGEN?) (2A) (XANTHENE?)) OR ((ROSE BENGAL) OR
TETRABROMO
L15 239017 S (TREAT? OR THERAP?) (2A) (CANCER? OR TUMOR? OR TUMOUR? OR
NEO
L16 35 S L14 (3P) L15
L17 2 S L16 AND L2
L18 1226518 S ((RADIOSENSITI?) OR ((RADIAT? OR ION? OR RADIO?) (5A)
SENSITI
L19 37 S L14 (5P) L15
L20 4 S L19 AND L18
L21 1141 S L1 AND L3
L22 14 S L21 AND ((IMAGE OR IMAGING) (2A) CONTRAST?)
L23 13 DUP REM L22 (1 DUPLICATE REMOVED)
L24 10142 S ROSE AND BENGAL
L25 0 S TETRABROMOERYTHROSIN
L26 0 S TETRACHLOROERYTHROSIN
L27 2063 S ?ERYTHROSIN
L28 358 S L24 AND L27
L29 35 S L28 AND (CANCER? OR TUMOR? OR TUMOUR?)
L30 35 DUP REM L29 (0 DUPLICATES REMOVED)

L20 ANSWER 3 OF 4 USPATFULL

ACCESSION NUMBER: 93:54499 USPATFULL

TITLE: Vectored drug delivery system using a cephaloplastin linking agent and a method of using the system

INVENTOR(S): Sharma, Yash P., 8210 Labbe La., Vienna, VA, United States 22180

	NUMBER	DATE
PATENT INFORMATION:	US 5225182	19930706
APPLICATION INFO.:	US 1991-786044	19911031 (7)
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Lacey, David L.	
ASSISTANT EXAMINER:	Adams, Donald E.	
LEGAL REPRESENTATIVE:	Cushman, Darby & Cushman	
NUMBER OF CLAIMS:	12	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1327	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The subject invention relates to a novel method for vectored delivery of physiologically-active chemical agents to a target organ, tissue or cell of interest and uses thereof. In particular, medical vectoring reagents which localize in a specific target organ, tissue or cell are conjugated with a drug or therapeutic agent using a linking agent, and the resulting conjugate is then introduced into the body. The chemical agent is thereby localized in the target organ, tissue or cell for effecting a therapeutic or physiological benefit or change therein.

SUMM Several radionucleides, radio pharmaceuticals, and other agents have been used for many years in **X-ray** and nuclear medicine departments. Such reagents are used to enhance the image organs or body systems such as liver, bone, . . .

SUMM . . . the group consisting of, for example, aggregated albumin, albumin colloid, disofenin, etidronate, phosphate, sulfur colloid, succimer, glucoheptonate, pentetate, gallium citrate, **rose bengal**, white blood cells, orthoiodohippurate, selenomethionine and thallous chloride.

SUMM The present invention also includes a method of **treating cancer** in a patient comprising administering to the patient an amount of a composition for the vectored selective delivery of a . . .

CLM What is claimed is:
. . . selected from the group consisting of: aggregated albumin, albumin colloid, disofenin, etidronate, phosphate, sulfur colloid, succimer, glucoheptonate, pentetate, gallium citrate, **rose bengal**, orthoiodohippurate, selenomethionine and thallous chloride.

12. A method of **treating cancer** in a patient comprising administering to said patient an amount of a composition for the vectored selective delivery of a . . .

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CLM What is claimed is:

1. A composition for the vectored selective delivery of a therapeutically-active agent to a desired mammalian target system, organ, tissue or cell comprising a conjugate composed of a pharmaceutically-acceptable non-toxic organ-specific, non-antibody vectoring reagent selective for said organ tissue or cell, a linking agent entity, comprising cephaloplastic, coupled thereto and a therapeutically active-agent coupled to said linking agent, said conjugate being capable of releasing said therapeutically active-agent with retention of its therapeutic activity to said organ, tissue or cell and wherein said vectoring reagent and said linking agent are coupled by passive adsorption, covalent bonding or a combination thereof, and said linking agent and said therapeutically active agent are also coupled by passive adsorption, covalent bonding or a combination thereof.
2. The composition of claim 1 wherein said non-antibody vectoring reagent is selected from the group consisting of: aggregated albumin, albumin colloid, disofenin, eitdronate, phosphate, sulfur colloid, succimer glucoheptonate, pentetate, gallium citrate, rose bengal, white blood cells, orthoiodohippurate, selenomethionine and thallous chloride.
3. The composition of claim 1 wherein said therapeutically active-agent is selected from the group consisting of: antibiotics, anti-cancer drugs, cardiac drugs, analgesics, anti-epileptic drugs, vitamins, and hormones.
4. The composition of claim 1 wherein said non-antibody vectoring reagent is aggregated albumin, said therapeutic agent is an anti-cancer drug, and said organ is the lung.
5. The composition of claim 1 wherein said composition is administered either orally or intravenously.
6. A method of delivering a therapeutically active-agent to a target organ, tissue or cell of a patient for therapeutic activity in said organ, tissue or cell comprising administering, to said patient, a composition comprising a conjugate composed of a pharmaceutically-acceptable non-toxic organ-specific, non-antibody vectoring reagent selective for said organ, tissue or cell, a linking agent entity, comprising cephaloplastic, coupled thereto and said therapeutically-active agent coupled to said linking agent, said conjugate being capable of releasing said therapeutically active-agent with retention of its therapeutic activity to said organ, tissue or cell, said composition being administered in an amount sufficient to effect said delivery and said therapeutic effect, wherein said vectoring reagent and said linking agent are coupled by passive adsorption, covalent bonding or a combination thereof, and said linking agent and said therapeutically active agent are also coupled by passive adsorption, covalent bonding or a combination thereof.
7. The method of claim 6 wherein said organ, tissue or cell is selected from the group consisting of: brain, liver, lung, kidney, bone, pancreas, parathyroid, thyroid, bone marrow, spleen, heart, cerebrospinal fluid compartments, lymphatic system, placenta, lung mediastinum, soft tissue, eye, venous vessel clots, arterial vessel clots, blood, and gastrointestinal tract.
8. The method of claim 6 wherein said non-antibody vectoring agent is

selected from the group consisting of: aggregated albumin, albumin colloid, disofenin, etidronate, phosphate, sulfur colloid, succimer, glucoheptonate, pentetate, gallium citrate, **rose bengal**, orthoidohippurate, selenomethionine and thallous chloride.

9. The method of claim 6 wherein said therapeutically active-agent is selected from the group consisting of: antibiotics, anti-cancer drugs, cardiac drugs, analgesics, anti-epileptic drugs, vitamins, and hormones.

10. The method of claim 6 wherein said non-antibody vectoring agent is aggregated albumin, said therapeutically active-agent is an anti-cancer drug, and said organ is the lung.

11. The method of claim 6 wherein said composition is administered wither orally or intravenously.

12. A method of **treating cancer** in a patient comprising administering to said patient an amount of a composition for the vectored selective delivery of a chemotherapeutically-active agent to a mammalian target system, organ, tissue or cell, said composition comprising a conjugate composed of a pharmaceutically-acceptable non-toxic organspecific, non-antibody vectoring reagent selective for said organ, tissue or cell a linking agent entity, comprising cephaloplastic, coupled thereto and a chemotherapeutically-active agent coupled to said linking agent, said conjugate being capable of releasing said chemotherapeutically-active agent with retention of its therapeutic activity to said organ, tissue or cell, said composition being administered in an amount sufficient to effect said treatment wherein said vectoring reagent and said linking agent are coupled by passive adsorption, covalent bonding or a combination thereof, and said linking agent and said therapeutically active agent are also coupled by passive adsorption, covalent bonding or a combination thereof.

L30 ANSWER 3 OF 35 USPATFULL

ACCESSION NUMBER: 1999:99518 USPATFULL
TITLE: Production of three-dimensional objects
INVENTOR(S): Neckers, Douglas C., Perrysburg, OH, United States
PATENT ASSIGNEE(S): Ciba Specialty Chemicals Corporation, Tarrytown, NY,
United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5942370	19990824
APPLICATION INFO.:	US-1997-893835	19970711 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1996-643790, filed on 6 May	

1996, now patented, Pat. No. US 5677107 which is a
continuation-in-part of Ser. No. US 1994-224503, filed
on 7 Apr 1994, now patented, Pat. No. US 5514519 which
is a continuation-in-part of Ser. No. US 1991-770123,
filed on 2 Oct 1991, now abandoned

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Chapman, Mark
LEGAL REPRESENTATIVE: Thompson Hine & Flory LLP
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 681

AB A method of producing a three-dimensional object having selected
elements which are colored differently than other elements of the
object

comprising the steps of:

(a) providing a film of a photohardenable composition containing a
photoresponsive agent,

(b) radiating the film in a cross-sectional pattern of the object to be
formed,

(c) selectively irradiating one or more portions of the cross-sectional
pattern corresponding to the selected elements which are desired to be
colored differently with radiation which activates the photoresponsive
agent, the photoresponsive agent thereby producing color in or removing
color from the selected irradiated portions of the cross-sectional
pattern,

(d) repeating steps a, b, and c to form successive adjacent
cross-sectional pattern of the object, and

(e) integrating the cross-sectional patterns together to provide the
three-dimensional object, wherein the curing and coloring steps are
conducted using actinic radiation.

DRWD The term "element" is used herein to mean any portion of a model such
as

a **tumor** within a model of a brain or a ligament within a model
of a knee.

DETD . . . Examples of compounds which change emission spectra by
ionizing

differently as a function of their environment include the xanthene
dyes

Rose Bengal, Eosin, erythrosin, fluorescein

and the like, the pyridinium and quinoline dyes such as those used as charge resonance probes 1(p-dimethylaminophenyl)-4(3-ethylpyridinium) butadiene tetrafluoroborate, . . .

DETD . . . dye into the polymer at points where the color is desired. For example, a reactive colored dye monomer such as **Rose Bengal** acrylate, the acrylate ester of 3-hydroxy **Rose Bengal** can be copolymerized with the polymerizable monomer during polymerization to selectively deposit the colored monomer in those portions of the. . .

L30 ANSWER 10 OF 35 USPATFULL

ACCESSION NUMBER: 1998:144145 USPATFULL

TITLE: Crosslinkable polysaccharides, polycations and lipids useful for encapsulation and drug release

INVENTOR(S): Soon-Shiong, Patrick, Los Angeles, CA, United States
Desai, Neil P., Los Angeles, CA, United States

Sandford, Paul A., Los Angeles, CA, United States
Heintz, Roswitha A., Los Angeles, CA, United States
Sojomihardjo, Soebianto, Pasadena, CA, United States
PATENT ASSIGNEE(S): VivoRx, Inc., Santa Monica, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5837747	19981117
	WO 9309176	19930513
APPLICATION INFO.:	US 1994-232054	19940428 (8)
	WO 1992-US9364	19921029
		19940428 PCT 371 date
		19940428 PCT 102(e) date
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1991-784267, filed on 29 Oct 1991, now abandoned	

	NUMBER	DATE
PRIORITY INFORMATION:	WO 1992-US9364	19921029
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Berman, Susan W.	
LEGAL REPRESENTATIVE:	Reiter, Stephen E.Gray Cary Ware & Freidenrich; Raymer, Gregory P.	
NUMBER OF CLAIMS:	29	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1548	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a new form of biocompatible materials (e.g., lipids, polycations, polysaccharides) which are capable of undergoing free radical polymerization, e.g., by using certain sources of light; methods of modifying certain synthetic and naturally occurring biocompatible materials to make polymerizable microcapsules containing biological material coated with said polymerizable materials, composites of said polymerizable materials, methods of making microcapsules and encapsulating biological materials therein, and apparatus for making microcapsules containing biological cells (particularly islets of Langerhans) coated with polymerizable alginate or with a composite thereof (e.g., alginate and PEG). The present invention also relates to drug delivery systems relating to the foregoing, as well as bioadhesives and wound dressings made utilizing the foregoing technology.

SUMM . . . effects of such biological materials on an organism, and conversely, the effects of the organism on the materials; encapsulation of tumor cells for evaluation of chemotherapeutic agents; encapsulation of human T-lymphoblastoid cells sensitive to the cytopathic effects of HIV; and the . . .

SUMM . . . cosynergist, activator, initiating intermediate, quenching partner, or free radical generator) are used. Examples of suitable dyes are ethyl eosin, eosin, erythrosin, riboflavin, fluorscein,

rose bengal, methylene blue, thionine, and the like;
examples of suitable cocatalysts are triethanolamine, arginine,
methyldiethanol amine, triethylamine, and the like. A . . .
DET D . . . Such in vivo assessments cannot be performed without the
benefits of immunoisolation afforded by the encapsulation technology. A
variety of **tumor** cells may be treated using this technique.
CL M What is claimed is:
23. A method according to claim 22 wherein said photosensitizing agent
is a dye selected from ethyl eosin, eosin, **erythrosin**,
riboflavin, fluorscein, **rose bengal**, methylene blue,
or thionine, and said cocatalyst is triethanolamine, arginine,
methyldiethanol amine, or triethylamine.

(FILE 'HOME' ENTERED AT 12:49:16 ON 20 AUG 2000)

FILE 'MEDLINE, EMBASE, SCISEARCH, USPATFULL' ENTERED AT 12:50:13 ON 20
AUG 2000

L1 6840 S (ROSE BENGAL) OR (HALOGEN? XANTHENE?)
L2 76220 S (CONTRAST? (2A) (AGENT? OR MEDIA OR MEDIUM))
L3 19609 S L2 AND (RADIATION OR ION? OR (X RAY))
L4 36 S L3 AND L1
L5 35 DUP REM L4 (1 DUPLICATE REMOVED)
L6 0 S L1 AND (RADIO DENSE)
L7 0 S L1 AND (RADIAT? (3A) DENSE)
L8 70127 S (CONTRAST? (A) (AGENT? OR MEDIA OR MEDIUM))
L9 58 S L1 AND L2
L10 36 S L9 AND L3
L11 16 S L10 AND ((X RAY) OR TOMOGRAPH?)
L12 15 DUP REM L11 (1 DUPLICATE REMOVED)
L13 29 S L1 AND L8 AND L3 AND L4
L14 4 S L13 AND (CANCER? OR TUMOR OT TUMOUR)
L15 4 DUP REM L14 (0 DUPLICATES REMOVED)
L16 24 S (ROSE BENGAL) (3P) (CONTRAST? (2A) (AGENT? OR MEDIA OR
MEDIUM
L17 40920 S ((X RAY) OR (TOMOGRAPH)) AND (CANCER OR TUMOR)
L18 0 S L6 AND L17
L19 8 S ((X RAY) OR (TOMOGRAPH)) AND L16
L20 4 S L16 AND (CANCER OR TUMOR)
L21 34 S L1 (3P) ((IMAGING) (2A) (AGENT? OR MEDIA OR MEDIUM))
L22 3 S L21 AND (CANCER? OR TUMOR? OR TUMOUR?)

L5 ANSWER 2 OF 35 USPATFULL

ACCESSION NUMBER: 2000:97686 USPATFULL
TITLE: Apparatus for transport of fluids across, into or from
biological tissues
INVENTOR(S): Tachibana, Katsuro, Fukuoka, Japan
Tachibana, Shunro, Fukuoka, Japan
PATENT ASSIGNEE(S): Ekos Corporation, Bothell, WA, United States (U.S.
corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6096000	20000801
APPLICATION INFO.:	US 1998-103644	19980623 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1997-166334	19970623
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Coggins, Wynn Wood	
ASSISTANT EXAMINER:	Kline, Eric	
LEGAL REPRESENTATIVE:	Wilson Sonsini Goodrich & Rosati	
NUMBER OF CLAIMS:	44	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	22 Drawing Figure(s); 9 Drawing Page(s)	
LINE COUNT:	720	

AB An apparatus for creating holes in a biological tissue is disclosed.
The

apparatus includes a housing which at least partially defines a fluid chamber. The fluid chamber including a tissue contact surface which is configured to be positioned adjacent the biological tissue. An ultrasound delivery device is positioned adjacent the fluid chamber and is configured to cavitate a fluid within the fluid chamber. A plurality of apertures extend from the fluid chamber through the tissue contact surface. The apertures are sized to permit passage of the cavitated fluid through the apertures.

DETD . . . drugs, vitamins, minerals, saline solution, various hormones (growth hormone, female sex hormones, antidiuretic hormone), steroids, anti-inflammatory drugs, anti-allergic drugs, photosensitizing

agents, contrast media, various proteins, genes, viruses, lidocaine or other local anesthetics, drugs used for general anesthesia, general painkillers, various psychotropic drugs, tranquilizers, . . .

DETD . . . configuration of apertures 5 is determined depending on the amount of energy, frequency, voltage, current and intensity of the ultrasound **radiation**.

DETD . . . filled with cavitation threshold reducing substances 18 as illustrated in FIG. 6. Examples of cavitation threshold reducing substances 18 include **rose bengal**, PHOTOFRIN, Eosin Y, Erythrosine B and various surfactants, etc. Filling the apertures 5 with a cavitation threshold reducing substance 18. . .

DETD . . . performed. Moreover, photosensitizing agents used in photochemotherapy can also be allowed to permeate into tissue. In addition, various types of **contrast media** can also be administered. The present invention can also be used in the

treatment

of colon cancer, cancers of the. . .